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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/810,323	03/26/2004	Lothar Blossfeld	Micronas.7441	8019
7590	12/07/2005		EXAMINER	
Patrick J. O'Shea O'Shea, Getz & Kosakowski, P.C. 1500 Main Street Suite 912 Springfield, MA 01115			AURORA, REENA	
			ART UNIT	PAPER NUMBER
			2862	
DATE MAILED: 12/07/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

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<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	10/810,323		BLOSSFELD, LOTHAR	
	<b>Examiner</b>		<b>Art Unit</b>	
	Reena Aurora		2862	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 - 15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 - 5, 7 is/are rejected.
- 7) ☒ Claim(s) 6 and 8 - 15 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. ____   |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>06/25/04</u> .  | 6) <input type="checkbox"/> Other: ____                                     |

## **DETAILED ACTION**

### ***Claim Objections***

Claim 1 is objected to because of the following informalities: What are first and second taps, a1, a2, a3 or a5. Appropriate correction is required.

Claim 3 is objected to because of the following informalities: What is meant by the phrase "in order to determine the second Hall voltage this voltage is tapped at taps". What is meant by the phrase "this voltage"? Appropriate correction is required.

Claim 8 is objected to because of the following informalities: What are first, two second taps, third tap and fourth tap? It is unclear how these taps are positioned with respect to each other. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000.

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Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1 - 5 and 7 are rejected under 35 U.S.C. 102(e) as being anticipated by Hohe et al. (6,768,301).

As to claims 1, 3 - 5 and 7, Hohe et al. (hereinafter referred to as Hohe) discloses a Hall sensor array for offset-compensated magnetic field measurements wherein applying a hall sensor current at a first (K1, fig. 1) and second (K3) taps of the Hall sensor, and determining a first Hall voltage at the third (K2) and fourth (K4) taps displaced from the first (K1) and second (K3) taps (col. 4, lines 15 - 20), applying a second Hall sensor current modified relative to the first, and determining a second Hall voltage (col. 7, line 33 – col. 8, line 7), and determining the Hall voltage and/or Hall voltage offset from the first and second Hall voltages determined, characterized in that the application of the second Hall current I is effected at taps that are spatially displaced from the first and/or second taps (col. 7, lines 18 - 32).

As to claim 2, Hohe further discloses that the second Hall voltage is effected at taps (K1, K3) that are spatially displaced from the taps (K2, K4) for determining the first Hall voltage.

#### ***Allowable Subject Matter***

Claims 8 – 15 are allowed.

The following is a statement of reasons for the indication of allowable subject matter: As to claims 8 – 15, the prior art fails to show a first central tap, and two second

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taps displaced relative to the first tap, to determine a first Hall voltage on both sides of the first tap between a third and fourth tap that are located between the first tap and fourth taps and for the second measurement system includes a switching device to apply a second Hall sensor current at the taps that are spatially displaced relative to the first, second, and additional second taps and to tap a second Hall voltage at taps that are spatially displaced relative to the third and fourth taps. These limitations taken together with the other limitations of the claims render the claims allowable over prior art.

Claim 6 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### ***Prior Art of Record***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Lowther (4,994,742) is cited for its disclosure of a Hall effect device and magnetic coil circuits for magnetic field detection.

Mehrgardt et al. (5,406,202) is cited for its disclosure of an offset compensated Hall sensor having plural Hall detectors having different geometrical orientations and having switchable directions.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Reena Aurora whose telephone number is 571-272-2263. The examiner can normally be reached on Monday - Friday, 7:00 - 3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, E. Lefkowitz can be reached on 571-272-2180. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Reena Aurora